



PRESIDENT'S MESSAGE



Andrew Shaw

MB, FCCM, FFICM, FRCA

*President
Society of Cardiovascular
Anesthesiologists*



Karsten Bartels

MD, MBA, PhD

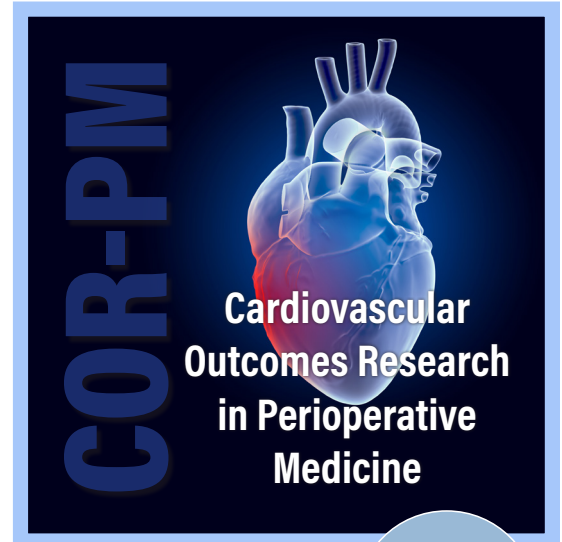
*Chair, COR-PM 2023
Scientific Program*

COR-PM Conference is Back for a Second Year!

The Society of Cardiovascular Anesthesiologists was thrilled to conduct the second-ever Cardiovascular Outcomes Research in Perioperative Medicine (COR-PM) conference held in person and online on Friday, May 5th, 2023, in conjunction with the SCA 45th Annual Meeting and Workshops in Portland, Oregon.

The COR-PM program was drafted by a group of diverse early- and mid-career anesthesiologists from across the U.S. to:

- 1) Advance our understanding of high-quality clinical outcomes research within the T2-T4 translational spectrum.
- 2) Provide mentorship capacity for early- and mid-career participants by providing a small-sized conference that permits "face time" with recognized leaders in the field, including Drs. Dan Sessler, Brittney Williams, Anthony Bonavia, Lisa Rong, Kimberly Howard-Quijano, Jochen Steppan and many more.
- 3) Create a personal, inclusive, and welcoming conference.



**Virtual
Content Still
Available!**

COR-PM 2023 PROGRAM COMMITTEE

Anthony Bonavia, MD

Kimberly Howard-Quijano, MD, MS, FASE

Nadia Lunardi, MD, PhD

Katie Schenning, MD, MPH

Shahzad Shaefi, MD, MPH

Jochen Steppan, MD

Eric Sun, MD, PhD

Brittney Williams, MD

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Randal S. Blank
MD PhD
Program Chair



Rebecca Y. Klinger
MD MS
Vice-Chair and
Abstract Coordinator



Emily Teeter
MD FASE
Workshop and Problem
Based Learning
Discussion Coordinator

Virtual Content Now Available!

MESSAGE FROM THE TAS PROGRAM COMMITTEE

Dear Thoracic Anesthesiology Colleagues,

We recognize how valuable your time is and the wide array of choices available to you for continuing medical education. In our ongoing effort to continuously improve both the educational value and availability of educational content of the Symposium, we are pleased to offer a post-program virtual experience.

Our goals for the Symposium were to provide updates in critical topics in Thoracic Anesthesia, to enhance learning of important techniques and skills, to promote discussion and debate of controversial topics in our field.

We are very grateful to our commercial sponsors for their generous and critical support of our educational program.

Sincerely,

Randy Blank, M.D., Ph.D.
Thoracic Anesthesia Symposium and Workshops Program Chair

TAS 2023 PLANNING COMMITTEE

Kathy E. Glas, MD MBA FASE
CME Committee Chair

Hilary Grocott, MD FASE FRCP
Board Liaison

Hyun Joo Ahn, MD PhD

Diana Anca, MD

Carly F. Bailey, MD

Archer Martin, MD

Massimiliano Meineri, MD FASE

Wanda M. Popescu, MD

Alessia Pedota, MD FASA

Patrick Wouters, MD PhD
EATAIC Liaison

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To View the Register for Virtual Content

**TAS
2023**

TAS



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Mary Beth Brady
MD FASE
Chair
Scientific Committee



Jonathan Ho
MD FASE
Vice Chair
Scientific Program



Stephanie Ibekwe
MD
Workshop and
PBLD Coordinator

Annual Meeting — Virtual Content Now Available!

MESSAGE FROM THE SCIENTIFIC PROGRAM COMMITTEE

Dear Colleagues,

We are confident that this virtual content will provide countless opportunities to enhance your knowledge. The educational program is full of research updates, state-of-the-art clinical advancements, and innovative content designed to explore contemporary care and examine pathways to promote patient care now and in the future.

The Scientific Program Planning Committee has created a program that will stimulate ideas, questions, discussion, and friendly debate. Highlights include multidisciplinary panels including cardiologists, cardiac surgeons, perfusionists, lawyers, research scientists, and of course anesthesiologists.

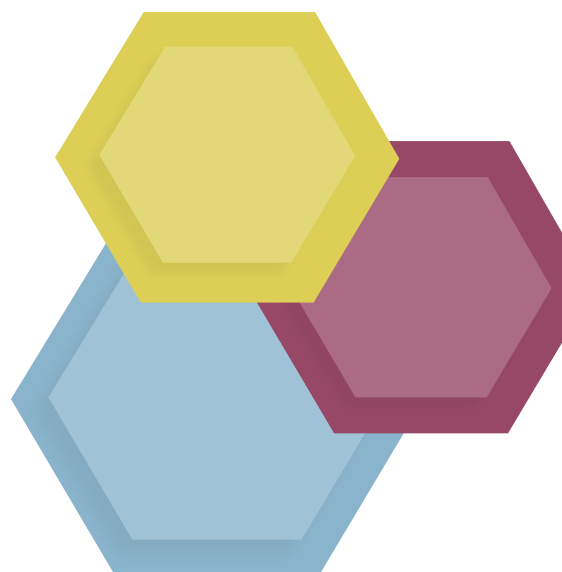
From a multidisciplinary session on contemporary approaches to Heart Failure, to an international panel on cardiopulmonary bypass management, to a never-before-seen collection of past SCA presidents sharing stories of the 45-year history of our society, each session is designed with you in mind.

Sincerely,

Mary Beth Brady, MD, FASE
Chair, Scientific Program Committee
2023 – 2024

[CLICK HERE](#)

**To View the Annual Meeting Agenda
and to Register for Virtual Content**



SCA

SCIENTIFIC PLANNING COMMITTEE

Kathy E. Glas, MD MBA FASE
CME Committee Chair

James Abernathy, MD
Liaison - STS Liaison

Megan Chacon, MD
Liaison - Co-Director, PoCUS

Nadia B. Hensley, MD
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Jochen Muehlschlegel, MBBS, FASE, FASA
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Sharon McCartney, MD, FASE
Liaison - Echo Week Program Planning Committee

Shahzad Shaefi, MD
Liaison - SOCCA

Randal S. Blank, MD, PhD
Liaison - Chair, TAS Program Planning Committee

Patrick Wouters, MD
Liaison - EACTAIC

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Director, Fellow and Resident Program

Jennifer Hargrave, DO
Coordinator, Fellow and Resident Program

Himani V. Bhatt, DO

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Michael K. Essandoh, MD, FASE

Mariya Geube, MD

Rhagavendra Govinda, MBBS, MD

Jiapeng Huang, MD, PhD

Ankit Jain, MBBS, FASE, FASA

Emily Methangkool, MD

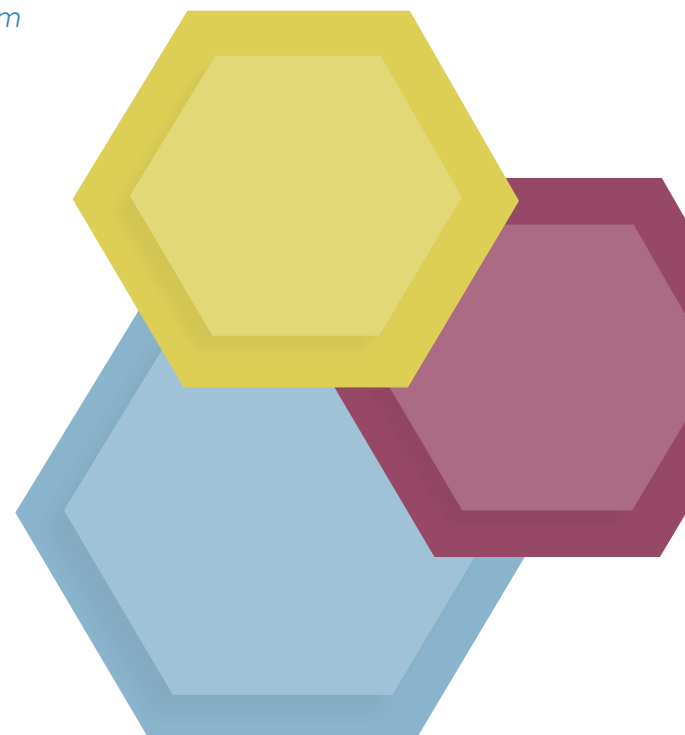
Mihai V. Podgoreanu, MD

Michele Sumler, MD, MA, FASE

Agnieszka Trzcinka, MD, FASE

Kelly Ural, MD, FASA

Alycia Wanat-Hawthorne, MD





Philip Jones
MD, FRCPC

Earl Wynands Lecture

False Discoveries — How Research Design and Analysis Influences Anesthesia Knowledge

Dr. Jones is a Full Professor in the Department of Anesthesia and Perioperative Medicine and the Department of Epidemiology & Biostatistics at The University of Western Ontario. He is currently moving to the Department of Anesthesiology and Perioperative Medicine at the Mayo Clinic Florida. He is an active clinician, and his practice is largely cardiac anesthesiology, echocardiography, and liver transplant anesthesiology. He is a trained researcher, having done a Master of Science in Clinical Trials. He is the Deputy Editor-in-Chief at the Canadian Journal of Anesthesia and, in addition, to clinical studies and studies involving administrative big data, he has a particular interest in metaresearch investigating study methodology and study reporting. He is the Chair of the Canadian Anesthesiologists' Society Research Advisory Committee and he is the immediate past Chair of the Research Ethics Board at his university.



Clyde W. Yancy
MD, MSc, MACC,
FAHA, MACP,
FHFSA, FASPC (Hon.)

Keynote Lecture

Attaining Health Equity – The Next Challenge

Dr. Yancy is the Vice Dean, Diversity & Inclusion Magerstadt Professor of Medicine Professor of Medical Social Sciences Chief, Division of Cardiology Northwestern University, Feinberg School of Medicine & Associate Director, Bluhm Cardiovascular Institute Northwestern Memorial Hospital.



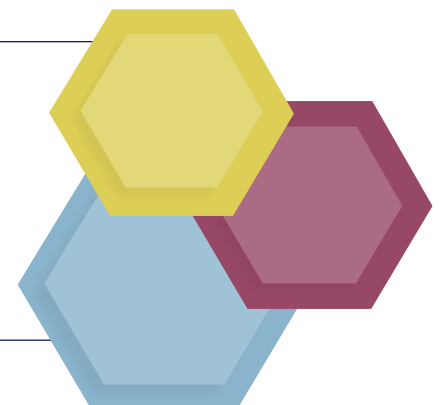
ASA Update

American Society of Anesthesiologists

Michael Champeau

MD FASA

President of the ASA



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with the exhibitors in the exhibit hall.**

VIRTUAL ONLY



ECHO BOARD REVIEW COURSE JUNE 3-4, 2023

Join Us to Prepare for the Echo Board Exam Review Course

A panel of experts will lead sessions designed to help prepare Echo Board candidates for the exam. The Echo Board Exam Review Course is designed for Fellows who will be sitting for the exam for the first time and for those who will be taking the exam to recertify their credentials.

The Echo Board Review Course is scheduled for the following days:

SATURDAY, JUNE 3

10:00am - 5:30pm CST

SUNDAY, JUNE 4

10:00am - 6:30pm CST

[**REGISTER NOW**](#)

for the 2023 Echo Board Review

[Click Here](#) to View the Agenda

CONTINUING EDUCATION

Boston Structural Heart

COURSE DATES: AUGUST 11-13, 2023**COURSE FORMAT: LIVE VIRTUAL**

Course Overview

Boston Structural Heart is a unique and state of the art course in structural heart disease (SHD) imaging, and is being presented as a virtual live course with extended period of access to attendees. This course is specifically designed for cardiologists, anesthesiologists, and physicians commonly involved in SHD imaging, as well as cardiac anesthesia fellows wishing to become experts in 3D imaging and broaden their skillset in imaging for SHD interventions. This course is being presented by expert faculty from a high volume SHD imaging center with extensive experience in the management of variations in SHD imaging.

Specifically, this course is designed to allow participants to learn the nuts and bolts of SHD imaging. The comprehensive curriculum has been structured to provide a graded progression of concepts from the very basic to the advanced aspects of SHD imaging. The course will commence with a comprehensive masterclass in 3D imaging to educate attendees on the various applications of 3D imaging for SHD. Additional workshops will cover safety and staffing model related SHD topics, along with comprehensive education regarding imaging for interventions including transseptal puncture, mitral valve, tricuspid valve, aortic valve and left atrial appendage.

These workshops will take the form of didactic lectures, case-based discussions, as well as panel discussions to discuss key concepts. As a course aimed to provide the most practical aspects of echocardiography, what participants learn in the course today, they can use tomorrow.

Who Should Attend

- Specialty Physicians
- Anesthesiology
- Cardiology and Vascular Medicine

[REGISTER NOW](#)[ACCESS MY REGISTRATION](#)

Learning Objectives

Upon completion of this activity, participants will be able to:

- Learn the basic fundamentals of ultrasound physics and how it applies to 3D imaging, image formation, transducer design & advanced topics such as multiplanar reconstruction.
- Use advanced concepts of 3D imaging such as multiplanar reconstruction.
- Appreciate room set-up and safety issues such as radiation safety for SHD interventions.
- Obtain knowledge of key fluoroscopic views used for SHD imaging and how these views correlate to echocardiography.
- Learn the complex anatomy of the intra-atrial septum and key imaging relating to trans-septal puncture with didactic lectures and also case examples with panel discussion.
- Acquire an in-depth understanding of imaging required for procedures involving the mitral valve, tricuspid valve and left atrial appendage.
- Appreciate the procedural steps involved in specific SHD interventions of the mitral valve, tricuspid valve, aortic valve and left atrial appendage as well as acquire an in-depth understanding of imaging required for these procedures.
- Learn about current and future training for SHD imaging as well as future directions in SHD interventions including new and evolving therapies.

SCA NEWS

LIVE
VIRTUAL
FORMAT



SCA 2023 Election RESULTS

SCA is pleased to announce the following individuals who have been elected to Society leadership positions:



President-Elect

Amanda A. Fox, MD, MPH
University of Texas Southwestern Medical Center



Secretary/Treasurer

Douglas Shook, MD FASE
Brigham and Women's Hospital



Director at Large

Andra E. Duncan, MD MS
Cleveland Clinic



Director at Large

**Jochen (Danny) Muehlschlegel, MD MMSc MBA
FAHA FASA**
Brigham and Women's Hospital

ELECTION RESULTS



Endowment Oversight Committee Fun Board Representative

Isobel Russell, MD PhD
University of California San Francisco



Continuing Medical Education (CME) Committee Member

Sarah C. Smith, MD MS
Westchester Medical Center



Nominating Committee Member

Theodore J. Cios, MD MPH FASA FASE
Penn State Health Milton S. Hershey Medical Center



Nominating Committee Member

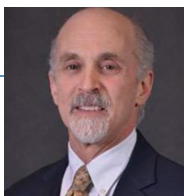
Peter J. Neuburger, MD
NYU Grossman School of Medicine





SCA's Outgoing Leaders – Thank You for Your Service

SCA would like to recognize the elected leaders whose terms of office have concluded. We greatly appreciate all their hard work towards improving our society, and we thank them for their involvement. elected to Society leadership positions:



Immediate Past-President, 2021-2023

Stanton Shernan, MD FAHA FASE
Brigham and Women's Hospital



Board Director, 2020-2023

Kenichi "Ken" Tanaka, MD
University of Oklahoma Health Sciences Center



Board Director, 2021-2023

Ludmil "Lou" Mitrev, MD
Cooper University Hospital



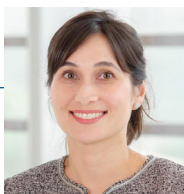
Founding Officer Successor, 2017-2023

James Ramsay, MD
University of California San Francisco



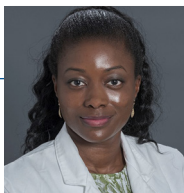
Endowment Oversight Committee Fund Board Representative, 2016-2023

David L. Reich, MD
Mount Sinai Hospital



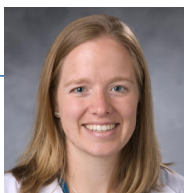
Nominating Committee, 2021-2023

Rebecca Aron, MD
The University of Nebraska Medical Center



Nominating Committee, 2021-2023

Abimola O. Faloye, MD FASA FASE
Emory Medical Center



CME Committee, 2019-2023

Brandi Bottiger, MD
Duke University



Adult Cardio Anesthesiology Fellowship Match Program

PROGRAM DETAILS

To provide more consistency and predictability to the ACTA fellowship application process, the ACTA programs participate in a common application and match process provided by SF Match for recruitment.

Applicants and programs participate by registering with SF Match and applicants applying to the programs of their choice. Both programs and applicants submit a rank list based on their preferences. Notably, only programs where an applicant has interviewed can be ranked in the match.

Critical to the match process, programs and applicants can make an Exception Agreement prior to submitting their rank list to SF Match. Exception Agreements allow an applicant and program to agree to match each other prior to submitting their respective rank lists. Importantly, all ACTA positions must be included in the match, including all Exception Agreement positions.

Exceptions to the standard match process have been agreed upon by the ACTA Fellowship Program Directors Council in the following situations:

- Applicants who are in active military service at the time of application.
- Internal candidates, i.e. applicants who are currently in the anesthesiology residency program at the same institution as the ACTA fellowship.
- Applicants who are making a commitment to come to the institution of the ACTA fellowship for more than one year.
- Applicants who are enrolled in an anesthesiology residency outside of the USA at the time of application.
- Applicants who reside outside the USA at the time of application or who are not eligible for ABA certification due non-US training.
- Applicants whose spouse or partner is applying for a GME-approved post graduate training program in a medical specialty in the same region as the ACTA fellowship.

Please note the following: Eligible applicants and programs who wish to take advantage of an exception rule are still required to participate in the match ranking process and must complete an exception agreement. Any match irregularities will be referred to the ACTA Fellowship Program Directors Council leadership.

Contact SCA's Operation Services at 847-805-8527 or via email to operations@scahq.org.

(continued)





TIMETABLE

2023 Adult Cardiothoracic Anesthesiology Fellowship Match for 2024 Positions

Monday, November 7, 2022
Applicant Registration

- Applicant registration begins.
- Please note that although registration is open up until the rank list deadline, applicants are encouraged to register as early as possible to allow time for application and interviews.

Wednesday, March 1, 2023
CAS Target Date

- This is the Target Date for applicants to complete the requirements for application distribution.
- This is NOT a deadline. Some programs accept applications at any time; others may set a deadline. It is the applicant's responsibility to contact training programs for individual deadline dates.

Thursday, June 1, 2023
@ 12:00 PM (noon) PT
Match Deadline

- ALL rank lists must be submitted by 12:00 PM (noon) PT. After the deadline, rank list choices will be locked and no changes can be made.

Thursday, June 15, 2023
@ 9:00 AM PT Match Results

- Match results are made available to programs and applicants. Log in to your SF Match account to view match results.

Friday, June 16, 2023
Post-match Vacancies

- Any vacancies which remain after the match will be announced on the Immediate Vacancies page. Vacancy listings are managed by the individual programs.

Friday, June 16, 2023
Post-match Vacancies

- Adult Cardiothoracic Anesthesiology fellowship training begins.

For additional information, please visit [Click Here](#)

2023 ICCVA-CASSA CONGRESS
TOWARDS SAFE CARDIOVASCULAR AND THORACIC SURGERY OUTCOMES

Date: 30 November – 2 December 2023
Venue: Century City Conference Centre, Cape Town

www.iccva-cassacongress2023.com

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2023 ICCVA-CASSA CONGRESS***Towards Safe Cardiovascular and Thoracic Surgery Outcomes***

The 19th International Congress of Cardiothoracic and Vascular Anesthesia in conjunction with the CASSA-JPC Congress

Date:

30 November – 2 December 2023

Venue:

Century City Conference Centre, Cape Town, South Africa

Website:

www.iccva-cassacongress2023.com

REGISTER HERE



AWEsome Woman Interview

Lavinia Kolarczyk MD, FASA

University of North Carolina

Introduction: I was born, raised, and educated in Pennsylvania. I attended medical school at Penn State College of Medicine in Hershey, Pennsylvania. I completed both anesthesiology residency and adult cardiothoracic anesthesiology fellowship at the University of Pittsburgh. I am currently a Clinical Professor of Anesthesiology at the University of North Carolina in Chapel Hill (2011-present). My area of expertise is quality improvement, specifically the design, implementation, and strategic spread of evidence-based clinical care pathways including Enhanced Recovery After Surgery (ERAS). I led the development and spread of ERAS at UNC Medical Center (13 surgical service lines) and across the entire UNC Health Care System in North Carolina. My clinical interest is ERAS thoracic surgery, and I serve on the SCA Working Group for Enhanced Recovery After Thoracic Surgery. I hold several leadership roles including Division Chief of Cardiothoracic Anesthesiology (2017-present), Medical Staff Physician Excellence Committee, Associate Director of the UNC Institute for Healthcare Quality and Improvement, and the Medical Director of Perioperative Care for the UNC Health Care System.

1. What led you to become a Cardiovascular/Thoracic Anesthesiologist?

When I was in medical school, I initially thought I wanted to be a cardiologist. I was fascinated with the heart and the pathophysiology of cardiac diseases. As I prepared myself for internal medicine and cardiology, a friend of mine suggested that I do an anesthesia elective rotation at the beginning of my fourth year. Anesthesiology beautifully weaved my interests, and I pivoted to anesthesiology. I was fortunate to match at the University of Pittsburgh for residency. I had tremendous exposure to cardiac and thoracic anesthesia during residency. I loved the challenge of these medically and surgically complex cases. I was fortunate to have incredible mentors including Drs. Erin Sullivan, Cynthia Wells, Theresa Gelzinis, Jeff Varga, Jose Marques, and Kathirvel Subramaniam who helped guide me throughout residency and fellowship, teaching me the skills to manage the sickest of the sick. I am truly grateful for how they influenced my clinical practice and my career.

2. How did you hear about the SCA?

My first exposure to the SCA was through my mentors at the University of Pittsburgh. These mentors encouraged me to become a member, attend my first meeting, and submit a medically challenging case. The rest is history. I have been attending the SCA every single year and enjoy the opportunity to collaborate with the best of the best in our field.

3. What roles have you held for the society?

For the past several years, I have been an active member of the Enhanced Recovery After Thoracic Surgery (ERATS) committee. In May 2023, I will transition to chair of this committee. I am also a member of the executive committee of the Women in Cardiothoracic Anesthesiology (WICTA) Special Interest Group and the newly formed Adult Congenital Heart Disease Special Interest Group.

4. What is one of your greatest achievements as a Cardiovascular/Thoracic Anesthesiologist?

My greatest achievement is serving as a role model and mentor for our next generation of cardiothoracic anesthesiologists. It is very rewarding to see a resident blossom in confidence and skill from CA-1 to fellowship, knowing that I helped shape that person's future. I am exceptionally proud of all these residents that I mentored (you know who you are!) and I will continue to be their biggest fan.

I am also proud of my local, regional, and national contributions to Enhanced Recovery



After Surgery (ERAS). I recognize the value cardiac anesthesiologists bring to perioperative care, leadership, and quality improvement. Early in my career (2013), I identified gaps in fluid resuscitation, hemodynamic management, and analgesia for major surgical oncology at my institution. I introduced ERAS as a vehicle to close these gaps and subsequently developed a strong local reputation as a leader in perioperative care. Over the past ten years, I have worked hard to expand ERAS principles into other surgical populations at my hospital including thoracic and cardiac surgery. ERAS became a UNC Health System initiative a few years ago, and I was selected to lead this state-wide effort. Throughout this journey, I gained valuable leadership, project management, and quality improvement skills. I am grateful for how this experience has transformed this cardiothoracic anesthesiologist into a perioperative leader.

5. Do you have any advice for fellows and residents?

Be better every day, in every aspect of your life. While you are training, push yourselves to see more, do more, learn more, experience more. This is what will transform you as a physician from good to great. Lastly, take time off before starting your first job. There will never be another time (until you retire) where you won't be on someone else's schedule. Cherish this time and do something fabulous.

6. Have you experienced any difficulties as a woman in the field?

Absolutely. Gender and age discrimination continue to be a problem for women in medicine. The discrimination is not just from surgeons, but sadly also from patients, nurses, and even colleagues within our own field. I was told once during training that someone with my personality type would not fare well in cardiac anesthesia. That comment has stuck with me for years, and I sometimes think to myself "I wish he could see me now..."

7. Do you have any advice for other women in the field?

Simple, sage advice: Be balanced, poised, and confident.

Maintain a balance between your self-care, your family, and your work. Too often we neglect ourselves to satisfy family and work duties. "When your own ship is sinking, everything is going down with it." Take a little time every day for something you enjoy—to listen to your favorite music on the drive to and from work, to exercise or meditate, to feel the sun on your face, to hug your loved ones.

Be poised in the moments that matter most. Everyone is watching you for your leadership and guidance. Sometimes being poised means listening more, lowering your voice, and talking less.

Be confident. There is no reason not to be. Trust your clinical instincts.

8. How do you balance work and personal life?

Balance is important to my overall well-being. After a long workday, I make a conscientious effort at home to disengage and be ever-present. This takes effort because evening "work creep" is tempting. I have learned that email responses can wait and not every email requires a reply. I have made a personal decision to not install work email on my personal phone because it is a distraction for me. On my non-clinical days, I set small goals for my administrative work. For me, small goals that are crossed off my to-do list make me feel accomplished. I have learned that dedicating an entire day to a big task like writing a paper or a presentation feels painful, and chances are I will not be able to do it all in one day. I would much rather spend two-hour time blocks on it multiple times over the course of a few weeks.

9. What is something you enjoy doing outside of work?

Outside of work, I love spending time with my family. I am an avid traveler, and I am always planning our next adventure. I like to plan immersive vacation experiences, where I can truly experience the food, culture, history, etc. I enjoy the beach and surf fishing with my husband Kevin. It feels so good to have my feet in the sand, fishing pole in my hand,



and the sun on my face. It feels even better when I am reeling in a big saltwater fish! My other hobbies include hiking, baking, creating craft cocktails, and making homemade pasta. My nephew Cy says that I make the best chocolate chip cookies in the whole world, and I wholeheartedly agree.

10. Would you change anything about the path you took to get to where you are now?

If I could change one thing, I would have completed a second fellowship in critical care. There are times when I leave the ICU after a case wanting to continue care. Thankfully I am blessed to work with several outstanding critical care fellowship trained colleagues at the University of North Carolina, and I know my patients are in great hands.

11. What was the best piece of advice you received?

The best piece of work-life advice I received dealt with conflict: Never argue with an angry surgeon in the heat of the moment. The surgeon wants to drag you "into the mud" in front of everyone. Don't fall into that trap. Wait until the next day to settle the conflict and deliver your words in private. The best opportunity to confront the angry surgeon in private is while they are at the scrub sink preparing to enter a case. In this setting, they have lost their audience, they cannot leave, and you get the last word.



THE 2023 ANNUAL MEETING KEYNOTE LECTURER:

**Clyde W. Yancy, MD, MSc***Northwestern University Feinberg School of Medicine**This article is drafted by Dr. Trevor S. Sutton, MD, MBA, Cardiac Anesthesiologist, Integrated Anesthesia Associates, Hartford Hospital, Hartford, CT.*

Health Equity in the Aftermath of 2020: The Path Forward

Dr. Yancy is Vice Dean for Diversity and Inclusion, Chief of Cardiology in the Department of Medicine, Magerstadt Professor and Professor of Medicine (Cardiology) and Professor of Medical Social Sciences at Northwestern University Feinberg School of Medicine. Dr. Yancy is a Past President of the American Heart Association and an elected member of the National Academy of Medicine.

Dr. Yancy attended college at Southern University in Baton Rouge, Louisiana, medical school at Tulane University where he was a member of the Alpha Omega Alpha Society, completed medical internship and residency at Parkland Memorial Hospital, and cardiology fellowship at the University of Texas Southwestern Medical Center. Following his fellowship, Dr. Yancy became the Carl H. Westcott Distinguished Chair of Medical Research at the University of Texas Southwestern Medical Center. In 2006, Dr. Yancy was appointed Medical Director of the Baylor Heart and Vascular Institute, and was subsequently appointed Magerstadt Professor at Northwestern University Feinberg School of Medicine in 2011.

Dr. Yancy's clinical practice, research, administrative leadership, and executive leadership have focused on heart failure, heart transplantation and prevention of heart failure with interest in racial and ethnic disparities in the presentation and outcomes for these conditions. More recently, Dr. Yancy's work has included examination of racial and ethnic disparities in cardiovascular morbidity and mortality following the Covid-19 pandemic.

Dr. Yancy is a distinguished researcher, clinician, and leader in medicine. He has more than 700 publications and has been listed by Thomas Reuters as among the top 1% cited researchers in his field. In 2020 Dr. Yancy was elected to the Association of American Physicians. He is the recipient of the Tulane University School of Medicine Outstanding Alumnus Award, the American Heart Association Physician of the Year Award, and the Association of Black Cardiologists Daniel Savage Award for Scientific Achievement.

Dr. Yancy's current professional leadership includes: 1. Chair, "Get with the Guidelines Heart Failure Subcommittee" (American Heart Association); 2. Advisory Committee, Chicago Department of Health; 3. External Advisory Committee, National Heart, Lung and Blood Institute; 4. Panel Member, Food and Drug Administration; 5. Advisory Committee to the Director National Institutes of Health. Dr. Yancy is an editorial board member of the Journal of the American College of Cardiology (Heart Failure), Circulation, and the American Heart Journal. He is also Deputy Editor of JAMA Cardiology, and Associate Editor of the American Journal of Cardiology.

The 2023 Keynote Presentation will take place on Monday, May 8, 2023, at 11:00 AM.



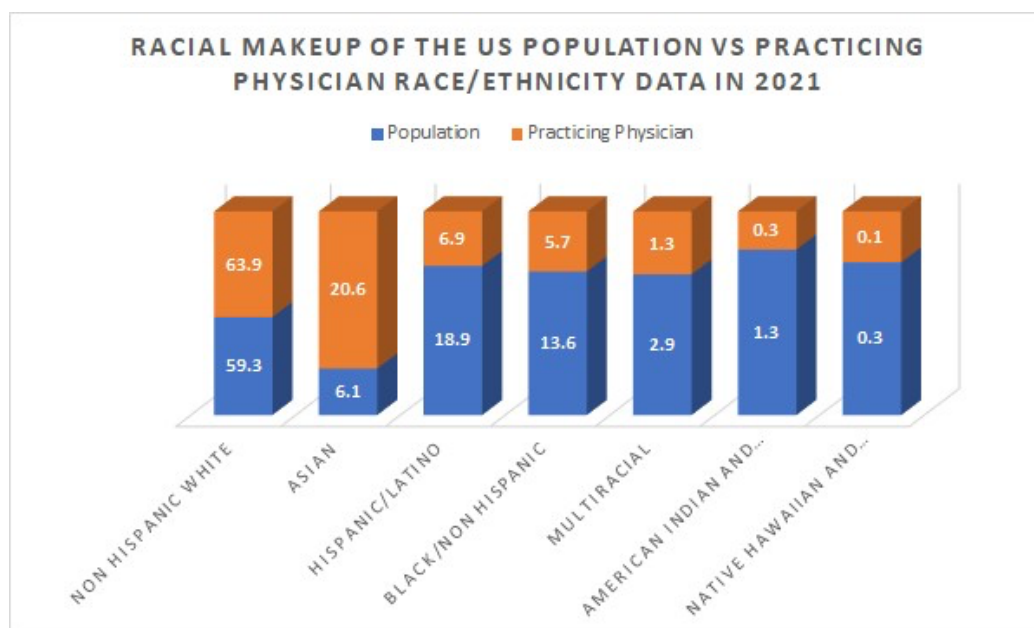
Mary E. Arthur, MD

Professor of
Anesthesiology and
Residency Program
Director
Vice-Chair for
Education and Faculty
Development
Medical College of
Georgia

The SCA Junior Resident Scholar Grant: Addressing the Pipeline Issue

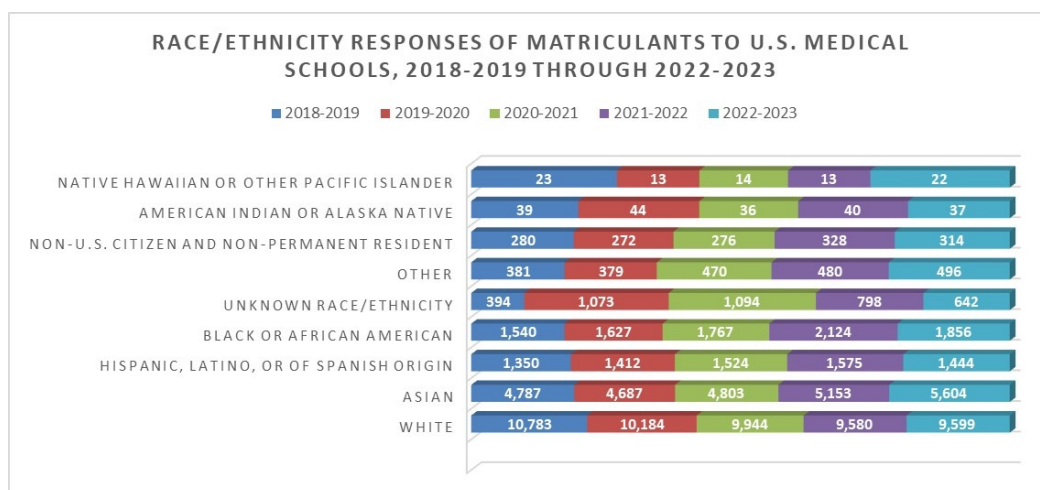
The demographics in the United States are shifting. With the U.S. Census Bureau projecting that the country will become a plurality nation by 2044, we, the physician workforce must think ahead to mirror the demographic shifts. Race, ethnicity, and gender-concordant physician-patient encounters have been associated with higher satisfaction scores from minority patients, especially when patients see themselves as having similar personal beliefs and values as their physicians.¹

While less than 50% of the population will be non-Hispanic White by 2045, the percentage of underrepresented minorities (URMs) is expected to remain a small fraction of U.S. physicians.²



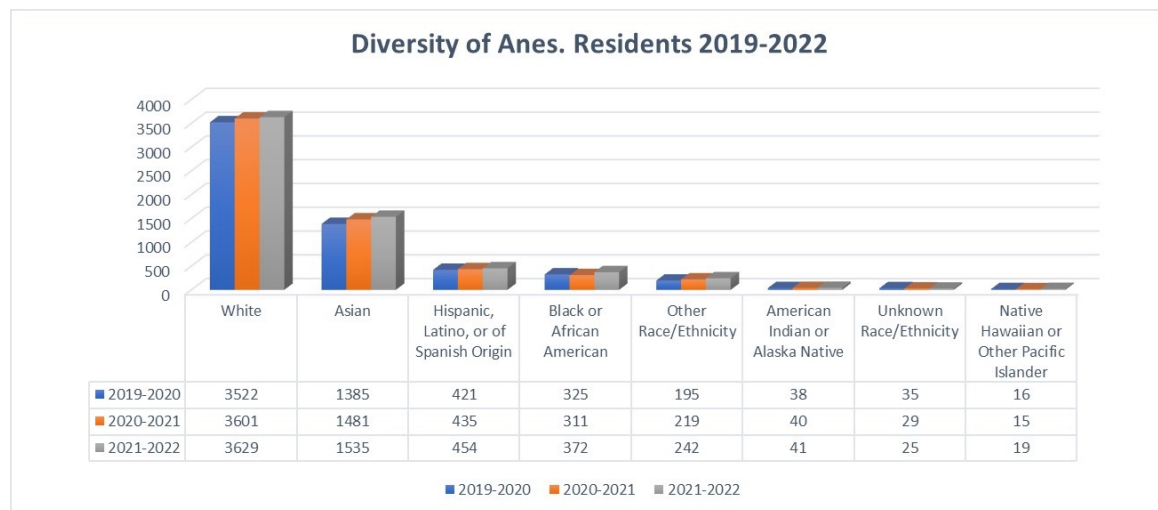
(Figure 1).

Sadly, pipeline efforts have not effectively increased the number of URMs in medical schools. The race and ethnicity composition of matriculants in U.S. medical schools over the last five years, 2018-2019 through 2022-2023, has been relatively stable with a very small fraction represented by URMs.

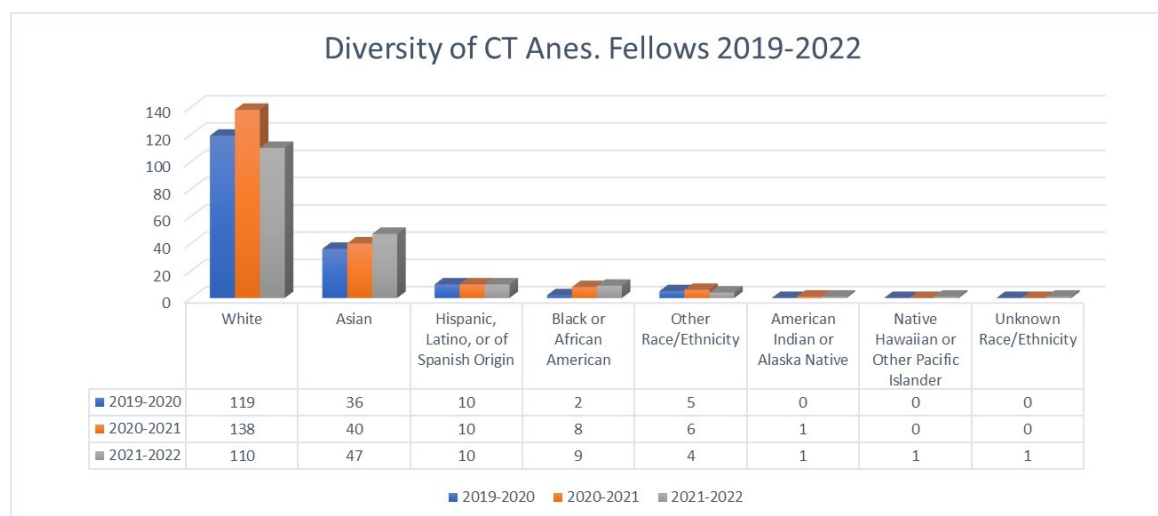


(Figure2)

The lack of significant demographic shifts is also reflected in anesthesiology residents and card anesthesiology fellows for the last three consecutive years.



(Figure 3)



(Figure 4)

The Way to Increase URM Numbers in Cardiothoracic Anesthesia

Creating a diverse and inclusive workforce is best accomplished via well-planned, intentional decisions to increase the number of URM in a subspecialty. Such choices require commitments and investments from leaders responsible for mentoring and creating long-term career opportunities. A good starting point is to invest financial resources in recruiting and developing high-caliber talent. The Society of Cardiovascular Anesthesiologists (SCA) Diversity, Equity, and Inclusion Committee (DEI) Junior Resident Scholar Program is a new program aimed at doing just that. This program will expose selected URM clinical anesthesiology year one (CA-1) residents to the clinical practice of cardiothoracic anesthesiology.

The selected URM resident scholars will be able to attend the SCA annual meeting to present, interact with, and be mentored by subspecialty leaders and other cardiothoracic anesthesiologists. Ten grants of \$1000 each will be awarded each year. Selection will be based on nominee's good standing in their current ACGME-accredited residency program, evidence of previous scholarship, understanding of the issues of DEI in cardiovascular medicine, and interest in cardiovascular anesthesia.

What would be a good return on our investment?

Many leading organizations are devoting time and money to diversity and inclusion training. Such programs help boost recruiting and set a tone that prioritizes a culture of diversity



and inclusion. Building a diverse and inclusive workforce often begins with data collection on race and ethnicity, highlighting gaps and disparities in an organization's diversity performance—information that can be used to develop specific plans to address inequities. This approach has been used successfully by the American Society of Anesthesiologists (ASA), the American Society of Regional Anesthesia and Pain Medicine, and now the SCA. The ASA credits its robust data collection for recognizing that gender and minority gaps existed within its leadership positions, providing an understanding of where discrepancies could be rebalanced.

Investment in diversity can help organizations improve patient satisfaction, patient care quality, and financial results [3]. Preparing for a cardiovascular anesthesiology workforce that reflects the diversity of our communities will better prepare us to meet the needs of all patients, given the projected shifts in demographics in the coming years. Therefore, initiatives that facilitate diversification through recruiting, retaining, and developing URMs in cardiovascular anesthesia are essential. We must repeatedly fine-tune our diversity efforts until a diverse workforce is a mainstay of our profession to complement our diverse patient population.

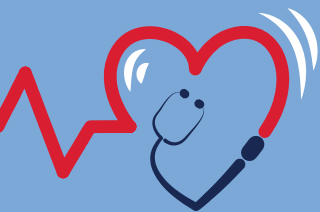
Sources for the Figures:

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This newsletter article was prepared by Dr. Mary Arthur, who is a member of SCA's DEI committee and played a significant role in the creation and implementation of SCA's Junior Scholar Grant.



The Intersection of Race and Ethnicity, Gender, and Primary Diagnosis on Lung Transplantation Outcomes

Sidra N Bonner MD MPH, Jyothi Thumma MPH, Valeria S M Valbuena MD MSc, James Stewart MD, Michael Combs MD, Dennis Lyu MD, Andrew Chang MD, Jules Lin MD, Elliot Wakeam MD MPH, The Intersection of Race and Ethnicity, Gender, and Primary Diagnosis on Lung Transplantation Outcomes, *Journal of Heart and Lung Transplantation* (2023), doi: <https://doi.org/10.1016/j.healun.2023.02.1496>

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Background

Racial disparities in medicine have become a primary focus of healthcare institutions across the world. Disparities exist with certain groups experiencing poor outcomes and barriers to access. Social determinants of health are increasingly recognized as factors driving health inequities.¹ Prior research in lung transplantation has investigated racial and ethnic minorities and demonstrated a wide variation in waitlist times and long-term outcomes.² Bonner and colleagues present a longitudinal cohort study of over 25,000 lung transplantation recipients. The authors aimed to evaluate how race and ethnicity, gender, and ESLD etiology are associated with mortality at 1 and 5 years post bilateral lung transplantation.³

Methods

Authors identified 25,444 patients who underwent lung transplantation from 2006-2019 through the Organ Procurement and Transplant network (OPTN) Standard Transplant Analysis Research (STAR) file. All patients 18 years of age and older, undergoing primary bilateral or single lung transplantation were included. Patient under the age of 18, those with repeat transplantation or multi-organ transplantation were excluded from the study. Patients were categorized by White, Black, or Hispanic racial and ethnic groups as well as male or female. The underlying ESLD etiology was also categorized and included obstructive, cystic fibrosis, restrictive lung disease, and pulmonary vascular disease. The authors defined the primary outcomes as mortality rate at 1- and 5-years post-transplant.

Results

Of the 25,444 patients included in the study cohort, 15,160 were men (59.6%), 21,345 were White (83.9%), 2,318 were Black (9.1%) and 1,781 were Hispanic (7%). The authors report that Black women had the highest mortality of all cohorts (14.51%; 95% CI). Authors reported significant variances among mortality and ESLD etiologies with obstructive disease having the lowest mortality (10.96%) and pulmonary vascular disease had the highest mortality (17.59%). When combined with ethnicity, Black patients with pulmonary vascular disease had the highest 1-year mortality (19.77%), while Hispanic patients with obstructive disease had the lowest (7.42%). The 5-year survival rate was highest among Hispanic patients (62.32%). Particularly, for all ESLD etiologies besides cystic fibrosis, Black patients had higher 1 year mortality. Overall, men had higher mortality rates compared to women (12.82% vs 11.87%).



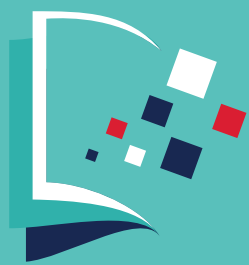
Discussion

This longitudinal cohort study examined the effect of race and gender on 1- and 5-year mortality rates. Authors challenged previous reports that women had the lowest post-transplant mortality and suggest that Black women have the worst short-term mortality in lung transplantation^{3,4}. However, this study demonstrated women overall have a better 5-year survival than men of all ethnicity. When analyzing ESLD etiology, restrictive and pulmonary arterial lung disease were the cohorts with highest mortality. The reader should consider that this study limited gender and ethnicity to White, Black, and Hispanic, not allowing for further aggregation of other racial and ethnic groups. Further investigation of disparities and outcomes in all ethnic groups is needed to address these inequalities and advance lung transplantation care. A multifaceted approach including improving access to care, addressing implicit biases among healthcare providers, and increasing diversity and representation in transplant teams is key to providing equitable care.

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CLINICAL INVESTIGATIONS AORTIC STENOSIS

Prognostic Value of Left Atrial Strain in Aortic Stenosis: A Competing Risk Analysis

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Reviewer:

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Background

Prediction of outcomes in patients with significant aortic stenosis (AS) is important for risk stratification, management, and timing of intervention. As per guidelines,¹ clinical presentation, symptoms, echocardiographic measurements such as aortic valve area (AVA), left ventricular ejection fraction (LVEF), LV diastolic function, as well as the biomarker N-terminal pro-B-type natriuretic peptide (NT-proBNP), are used for prediction of outcomes, risk stratification and to guide appropriateness and timing of intervention. The effects of chronic aortic stenosis on the myocardium consist of hypertrophy which then transitions to replacement fibrosis leading to diastolic and systolic dysfunction. Abnormal tissue deformation or strain a surrogate of fibrosis, although not in the existing guidelines, has been associated with poor outcomes.² The effects of aortic stenosis, as measured by echocardiography, are not limited to the left ventricle. Echocardiographic measurements of the left atrium,⁴ indicative of chronic hemodynamic load, such as increased left atrial volume index (LAVI) or left atrial (LA) deformation indices,^{5,6,7,8,9} have been associated with higher mortality or cardiac events in patients with moderate or severe aortic stenosis. Because of inconsistencies and methodologic limitations, the importance and role of LA strain has not been well established. The goal of this study was to examine the prognostic value of phasic LA strain in relation to clinical and echocardiographic variables and NT-proBNP in asymptomatic and minimally symptomatic patients with moderate or severe AS and normal LVEF.

Study Design and Methods

This was a prospective multicenter study. By entry transthoracic echocardiography, participants had moderate or severe AS: peak transaortic jet velocity (V_{max}) ≥ 3.0 m/sec or aortic valve area (AVA) ≤ 1.2 cm², measured by continuity equation, LVEF $\geq 50\%$, no or minimal symptoms (NYHA class I or II) and no more than moderate mitral or aortic insufficiency. Assessment of comorbidity burden and 6 min walk test was done when feasible. Transthoracic echocardiography was performed and interpreted according to the American Society of Echocardiography guidelines, using Automated Function Imaging software (EchoPAC version 108.1.13; GE Healthcare). LV GLS was measured from 3 apical planes. Speckle tracking was used for estimation of LA strain¹⁰ in 2 and 4 chamber apical views as LA reservoir strain (LASr), LA conduit strain (LAScd) and LA contractile strain (LAct), on the respective phases of the LA cycle; reservoir, conduit and contractile.



Primary outcome: composite of all-cause mortality, hospitalization for heart failure (HF), progression to NYHA functional class III or IV, acute coronary syndrome (ACS) or syncope.

Secondary outcome 1: composite of primary outcome events excluding ACS.

Secondary outcome 2: composite of primary outcome events excluding ACS and syncope.

Data was collected from semiannual research visits. Dates of achieving the primary or secondary outcomes, and dates of AVR or last research visit were censored.

Through statistical analyses, the prognostic performance of phasic LA strain cutoffs was evaluated. Competing risk analysis was performed using AVR as the competing risk.

Results

The median follow-up period of the 173 patients enrolled was 2.7 years and age distribution 69 ± 11 years with 55% males. There were 34 (20%) deaths (14 cardiovascular), 28 (16%) hospitalizations for HF, 37 (21%) instances of progression to NYHA functional status III or IV, 22 (13%) ACS, and 10 (6%) syncopal events. The primary, secondary 1 and 2 outcomes happened in 66, 62 and 59 patients respectively, and 78 (45%) patients underwent AVR (15 for asymptomatic disease progression or physician recommendation). Median phasic LA strain values were 27%, 12%, and 16% for LASr, LAScd and LASct respectively. The primary outcome occurred in higher incidence among patients in the lowest tertile (worst strain) of the cumulative incidence function curve for each phasic LA strain. Optimal cutoffs in relation to the primary outcomes were LASr < 20%, LAScd < 6% and LASct < 12%. From the competing risk analysis, incorporating echocardiographic measurements, clinical values and NT-proBNP, LA strain parameters were consistently significant predictors of clinical outcomes ($P < 0.5$). LASr < 20% was independently associated with the primary and secondary 1 outcome, LAScd < 6% was associated with all defined outcomes (with the highest specificity, 97%, and positive predictive value, 82%, for predicting the primary outcome), while LASct < 12% was independently associated with the secondary outcome.²

Conclusions and Discussion

Results from this study support the use of LA strain in the prognostic evaluation of mildly symptomatic or asymptomatic patients with moderate or severe AS and normal LVEF. LA strain outperformed other echocardiographic, clinical predictors or biomarkers in identifying the patients with the worst outcomes. The prognostic role of LA strain and potential assistance in better timing the AVR has recently been suggested in other studies with some inconsistency in the results and methodologic limitations. The current study complements previous studies in several ways such as:

1. Use of competing risk analysis in assessing the predictive value markers with AVR been the competing risk.
2. The superior prognostic power of LA strain over other parameters and markers was demonstrated.
3. Although the LASr < 20% cutoff has been identified in previous literature, consistent LA strain cutoffs for other phases of the LA cycle have not been reported and may be significant predictors in the different stages of the disease, as it progresses from mild to severe AS.



4. The strong predictive value of LAScd <6% of all clinical end points may complement clinical predictive models using NT-proBNP.

The gradual loss of LA contractility and deformation, as reported with phasic LA strain values is a result of maladaptive process and replacement fibrosis. Phasic LA strain is indicative of disease progression and can potentially be used as an “imaging biomarker” for prediction of outcomes.

Limitations of the Study

Results from this study support the use of LA strain in the prognostic evaluation of mildly symptomatic or asymptomatic patients with moderate or severe AS and normal

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Significance of Spontaneous Echocardiographic Contrast in Transcatheter Edge-to-Edge Repair for Mitral Regurgitation

Sato H, Cavalcante JL, Enriquez-Sarano M, et al. J Am Soc Echocardiogr 2023;36:87-95.

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Spontaneous echocardiographic contrast (SEC) is observed during echocardiography signifies blood stasis and may be an increased potential risk for thromboembolism.¹ In procedures like mitral regurgitation (MR) undergoing transcatheter edge-to-edge repair (TEER), SEC may occur with placement of clips.² There is no known evidence showing significance of SEC after TEER in relation to acute and long-term outcomes. This study was performed to find the relation between SEC and clinical as well as long-term outcomes.

Methods

The study included patients with symptomatic, moderately severe or severe MR who underwent TEER procedure using the MitraClip system. Inclusion criteria were (1) Carpentier type I, II, or IIIb classification for MR (i.e., no type IIIa) and (2) implantation of at least one MitraClip device. Exclusion criteria were the presence of (1) rheumatic disease, (2) radiation heart disease, (3) mitral valve area (MVA) < 3.5 cm², and (4) SEC at baseline. A transseptal sheath was used to measure left atrial pressure (LAP).

Transesophageal echocardiography was used in the procedure to look for SEC in the left atrium or left atrial appendage (LAA). SEC was defined as the presence of dynamic, smokelike echocardiographic findings within the left atrial (LA) cavity. SEC was further classified as: grade 1 (mild), minimal echogenicity in left atrium or LAA; grade 2 (mild to moderate), more dense swirling pattern with similar distribution as grade 1; grade 3 (moderate), dense swirling pattern in the left atrium or LAA; and grade 4 (severe), intense echo density and very dense swirling pattern in the left atrium or LAA.³ After TEER procedure the residual MR was evaluated with TTE on postoperative day 1 and graded according to a three-point scale (none or mild, moderate, or severe). The authors examined the relationship between the occurrence of SEC and incidence of stroke or death in the perioperative period and during clinical follow-up. The primary end points of interest were survival free of all-cause mortality.

Results

The study included 316 patients. Among those 199 patients (63.0%) had atrial fibrillation or flutter, and 146 patients (46.8%) were on anticoagulation. SEC was seen in 106 (33.5%) patients during the procedure. Mild or grade 1 SEC was seen in 79 (67%) patients. Mild to moderate (grade 2) in 67 patients, and 27 patients had moderate (grade 3) or severe (grade 4). Also noted was the fact that the XTW device was associated with SEC, while other devices were not. The procedural time overall was shorter for SEC patients ($P < .001$). Most of the patients with mild or no residual MR ($n = 153$ [59.3%]) did not have SEC (negative predictive value of 27.1%). The appearance of SEC was not related to baseline LA dimension or LA volume index. One month after the procedure, residual MR grade was evaluated in 294 patients. It was noted that the occurrence of TEER-associated SEC had a significant relationship with optimal MR reduction (i.e., mild or less MR; $P = .001$). This was consistent in 1-year follow-up echocardiography ($P = .05$). The positive predictive value of SEC for optimal MR reduction at 1 month was 77% and was 65% at 1 year. The authors found that the occurrence of SEC was associated with beneficial outcomes of TEER, both at 30 days



and within 2-year follow-up. Also SEC was not found to be associated with a risk for stroke. All stroke cases were in patients without SEC. Any cause mortality was more frequent in the patients without SEC (54 [25.7%] vs 11 [10.4%], $P < .001$), with 2-year survival estimates being 88.4% and 71.5%, respectively ($P = .004$). Patients who had SEC during TEER also had better 2-year survival outcomes (87.0% vs 69.2%, $P = .002$). Patients with SEC also had better survival (81.1% vs 52.1%, $P < .001$) for the composite end point of any death, stroke, mitral valve surgery, and heart failure rehospitalization within 2 years.

Discussion

SEC is more frequently observed in patients with atrial fibrillation, mitral stenosis, and enlarged left atria whether the patient is using anticoagulation or not.⁴ This study found that SEC occurrence in TEER procedure has beneficial outcomes and is strongly associated with optimal MR reduction. Also, SEC appearance during TEER is associated with greater intermediate-term survival free of all-cause mortality. The appearance of SEC was not found to increase the risk for stroke. Mechanism of SEC appearance is most likely the proper leaflet apposition from TEER causing the stagnation of blood. This results in significant augmentation in coaptation reserve that alleviates MR. Usually in current practice, the presence of SEC in the absence of optimal MR reduction or elevated gradients has been used as an indication to abandon a TEER procedure or proceed with implantation of a second clip.⁵ This study data suggest that this approach may not be justified.

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Volatile Versus Total Intravenous Anesthesia on Postoperative Delirium in Adult Patients Undergoing Cardiac Valve Surgery: A Randomized Clinical Trial

Jia-Li Jiang, MD, Lu Zhang, MD, Lei-Lei He, MD, Hong Yu, MD, Xue-Fei Li, MD, Shun-Hui Dai, BSN, and Hai Yu, MD, PhD. *Anesth Analg*. 2023;136(1):60-69.

Reviewer:

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Background

Postoperative delirium (POD) is a common complication of cardiac surgery, with an incidence of 26-52%.¹ Patients suffering from POD have impaired surgical recovery, longer hospital stay, higher morbidity and mortality, increased cost, and functional and cognitive decline. Prior studies investigating anesthesia maintenance regimen related to cardiac surgical outcomes have had mixed results and did not focus on cardiac valve surgery.² The goal of the authors in this trial was to evaluate the effect of volatile anesthesia (VA) compared with propofol-based total intravenous anesthesia (TIVA) on POD incidence after on-pump cardiac valve surgery.

Methods

This study was a single center randomized controlled trial at the West China Hospital of Sichuan University consisting of two parallel arms. One thousand eight hundred thirty-five adult patients undergoing elective on-pump valve surgery with or without CABG were screened for enrollment. One thousand one hundred and thirty-seven patients were excluded from the trial for baseline visual, auditory, or language impairments impacting their ability to communicate effectively; classification as an ASA IV or above; history of neurosurgery or brain trauma, epilepsy, Parkinson's disease, dementia, schizophrenia, depression, or alcohol; prior use of benzodiazepines, steroids, or tranquilizers; hepatic or renal failure; or suspected allergy to study drugs or malignant hyperthermia.

Included patients (698) were randomly allocated 1:1 to the VA group or the TIVA group. The VA group was maintained with sevoflurane or isoflurane at a minimum end-tidal concentration of 0.5 to 2 MAC, including on cardiopulmonary bypass. The TIVA group received propofol at an infusion of 3 to 8 mg/kg/h through the entire case. Both groups were also maintained with a remifentanyl infusion, sufentanil boluses, and cisatracurium. Anesthetics were titrated to a bispectral index of 40 to 60. Induction of both groups was the same and all patients were taken to the ICU intubated and sedated with a propofol or dexmedetomidine infusion until meeting extubation criteria.

The primary outcome was the incidence of delirium within the first 7 postoperative days as measured by the confusion assessment method for the ICU (CAM-ICU) tool once daily. Secondary outcomes included delirium duration and subtype, 30-day all-cause mortality, pain score within the first 3 days, major morbidity, ICU and hospital length of stay, and duration of mechanical ventilation. T tests were used to measure continuous variables and Pearson's chi-squared test was used for comparisons between groups.

Results

Primary outcome analysis: The incidence of POD within the first 7 days was 63 of 337 (18.7%) patients in the VA group and 76 of 339 (22.4%) of the TIVA group, with no statistically significant difference between the intention to treat (ITT) analysis (RR 0.80 [95% CI 0.55-1.16], $P=0.231$). The per protocol analysis also showed no significant difference.



Secondary outcome analysis: There were no significant differences in any secondary outcomes measured in the study. POD duration was 1 (median 1-2) day in the VA group and 1 (1-2) day in the TIVA group ($P=0.293$). Hypoactive delirium was the most common type of delirium in both subgroups (82.5% in the VA group, 88.2% in the TIVA group; $P=0.347$). The ITT analysis and PP analysis agreed. On subgroup analysis of the primary outcome, there was no difference between the groups based on age, sex, education level, and baseline cognition.

Discussion

This single-center randomized control trial found no difference in POD incidence between intraoperative anesthetic maintenance regimen with volatile anesthesia compared to propofol-based TIVA in adult patients undergoing on-pump cardiac valve surgery. This study was well powered to find differences between the groups and utilized a study design that was simple and realistic for general practice. They did not restrict the use of benzodiazepines or dexmedetomidine in the operating room, nor did they control for propofol infusion use in the ICU, which may have weakened the potential benefit of VA in the intraoperative period. There was no difference in the usage of midazolam, dexmedetomidine, post-operative propofol or other medications between groups.

The patient selection was limited to only patients undergoing valve surgery, but with strict exclusion criteria, resulting in a patient population that was young (average age 53.8), mainly women (55.7% in this study), poorly educated (71.8% had less than a high-school education), and primarily suffering from rheumatic heart disease (80% of the patients in this study).

Past studies found that the use of volatile anesthetics intraoperatively reduced the incidence of postoperative cognitive dysfunction in on-pump cardiac surgery patients when compared to propofol.^{3,4} Limitations to this study include the single-center nature of the study, the utilization of only CAM-ICU delirium data, and a relatively limited patient population which may not reflect the most common population presenting for cardiac surgery (more comorbidities, male, older).

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